Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

1.967
A2C82

AGRICULTURE

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH ADMINISTRATION
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
WASHINGTON 25, D. C.

In Cooperation with State and Federal Agencies

COTTON INSECT CONDITIONS FOR WEEK ENDING JULY 7, 1945
(Eleventh Cotton Insect Survey Report for 1945)

Boll weevil conditions continue threatening. The average percentages of infestation show a slight decrease in a number of states but the change is due more to a rapid increase in squaring than a decrease in weevils. Weather conditions during the week were generally favorable for weevil development and the large brood of first generation weevils that is now emerging indicates a sharp rise in infestation. Weevils seem to be present in a greater proportion of the fields than usual and only those fields approaching maturity in the southern sections where the weevil occurs can be considered out of danger.

The leafworm continues to develop very slowly and no new infestations were reported.

Bollworms are increasing in Texas. Cotton on overplowed land or that is making rank, succulent growth from abundant rains should be watched for bollworms and dusted while the worms are still small.

Fleahoppers continue to cause less than normal damage in Texas and Oklahoma.

BOLL WEEVIL

TEXAS:
Moisture and drought conditions were extremely varied. In central and eastern Texas moisture was adequate to excessive in spots. West Texas varied from drought to floods. Some areas of the northwest were benefited from recent rains but cotton condition is very irregular with some early-planted fields blooming and others just coming up.

The weevil infestation in 528 fields in 65 counties averaged 32%, a decrease from 40.4% last week. Two percent of the fields examined were not infested; 21% of the fields ranged from 1 to 10%; 29% from 11 to 25% infestation; 25% from 26 to 50% infestation; and 23% above 50% infestation. In two southern counties where squares were scarce, the average infestation was 92%; in 8 coastal counties the average was 28%; in 13 east Texas counties the average was 34%; in 18 blackland counties the average was 20%; and in 2 north central counties the average was 34% infestation. Insecticides were being used in only 30 of the fields examined.

OKLAHOMA: Cotton made good progress but squares are not numerous enough for infestation records in northern counties. Local rains during the week.

Square examinations in 112 fields in 16 southern and central counties averaged 10% infestation, which is high for this time of the year. Over half of these fields had more than 10% punctured squares and infestations of 25 to more than 50% were reported from McCurtain, Choctaw, Marshall and Love Counties in southeastern Oklahoma.

(Over)

(Okla. continued)

Plant examinations in 117 fields in 16 counties averaged 165 weevils per acre. This is a decrease from 195 last week but cotton is larger and weevils harder to find.

LOUISIANA: Cotton is fruiting rapidly. Rainfall was spotted with showers or no rainfall reported from various sections. In many sections conditions were favorable for weevils and high infestations are developing in fields near favorable hibernation quarters. Considerable dusting is being done. No change in insecticide situation.

Examination of 367 fields showed an average of 18% infested squares as compared to 16% last week. Seven percent of the fields examined were not infested; 40% of the fields ranged between 1 and 10%; 28% of the fields ranged from 11 to 25%; and 25% of the fields averaged above 26% punctured squares. The highest infestations were again in the southwestern, central, and north central parishes, with averages of nearly 30% infestation.

ARKANSAS: Local rains during the week. The square infestation in 119 fields in the southern third of the state averaged 10% or double that of last week. In 28% of the fields no punctured squares were found; in 44% the range was from 1 to 10% infestation; in 16% the range was from 11 to 25% infestation; and in 12% of the fields the infestation was above 26%. In the south central counties the infestation averaged 37% and in the southeastern counties 5%.

MISSISSIPPI: Infested squares were found on 170 of the 375 fields examined in 36 counties. The average infestation was 8% for all fields examined and 13% in the infested fields, or a slight decrease from last week. High infestations were found in the central and northern sections of the state with some fields of 50% or more punctured squares in Chickasaw, Clarke, Lauderdale, Lee, Newton and Warren Counties, and 25% infestations in Copiah, Holmes, Itawamba, Kemper, Monroe, Wayne and Yazoo Counties. Insecticides were needed in 24 of the fields inspected.

All Delta counties received some rain this week which was needed only on small cotton in the northern section. Adults of the first generation are appearing, which is about two weeks later than last year. Infested squares were found in 161 of the 236 fields inspected in 13 Delta counties. The average infestation was 5.8% for all fields and 9% for the infested fields. The apparent reduction from 14% in infested fields last week is due more to a rapid increase in squares than to decrease in weevils.

No infestation was found in 32% of the fields; from 1 to 10% punctured squares were found in 52% of the fields; from 11 to 26% in 12% of the fields; and above 25% infestation in 4% of the fields. Cotton is just approaching the stage where protection by insecticides is needed.

GEORGIA: Showers were general and conditions favorable for weevil increase over most of Georgia. First generation weevils are becoming numerous in the southern half of the state.

Records from 123 fields in 45 counties showed an average infestation of 22% as compared to 23.5 last week. Some of the southern counties showed a considerable increase in infestation, but more records from northern counties and the increase in the number of squares per plant held the average percentage of punctured squares about the same as last week.

Only 1% of the fields examined were not infested; in 26% of the fields the infestation ranged between 1 and 10%; in 42% the range was between 11 and 25%; in 28% the range was between 26 and 50%; and in 3% of the fields the infestation was above 50%. Most fields in the southern section of Georgia that have not been dusted need weevil control.

SOUTH CAROLINA: Cotton is fruiting rapidly and in some southern counties has passed the peak of squaring. The hot, dry weather in the Piedmont, central and southern counties was partially broken during the latter part of the week by scattered showers and lower temperatures, although most Piedmont counties are still suffering from lack of rain. Conditions were favorable for weevil development in the Pee Dee Section, but cotton is well advanced.

Examination of 276 fields in 39 counties well distributed over the State averaged 15.5% punctured squares as compared to 18.8% last week. Eight percent of the fields were not infested; in 39% of the fields the infestation ranged from 1 to 10%; in 33% of the fields from 10 to 25%; in 17% of the fields from 26 to 50%; and in 3% of the fields above 50% punctured squares. Infestations averaged above 20% in 10 eastern and central counties and are sufficiently abundant over the entire State to cause heavy damage if favorable weather prevails.

ALABAMA: W. A. Ruffin reports the square infestation on 47 fields in six central and southern counties ranged from 4 to 64% with an average of 21.5% punctured squares. Many farmers in this area have used one or more applications of calcium arsenate. Aphids continue to be a problem, particularly in fields that have been dusted two or three times, and to date distributors have been unable to obtain nicotine for control.

NORTH CAROLINA: Temperatures and rainfall were favorable for weevil development in the south central counties where frequent showers have occurred for the past two weeks. Rains are needed in some Piedmont counties.

The infestation in 105 fields in 15 central and northeastern counties averaged 8.4% this week. No infestation was found in 6% of the fields; from 1 to 10% in 64% of the fields; and above 10% in 30% of the fields. Average infestations of 24% were found in Lenoir County, 19% in Greene, and 11% in Wilson County.

Mr. J. Myron Maxwell, Extension Entomologist, writes: "We are quite concerned with boll weevil this year because cotton is quite late, many fields not yet having squares.*** Several county averages are already near 10%. With first generation adult weevils emerging this week in the southern part of the State, I fear serious damage can result."

VIRGINIA: Dr. J. M. Grayson reports that several showers during the week in the vicinity of Holland were beneficial to cotton. Of the 4 fields examined in that section 2 were not infested, one had 2% and one 4% punctured squares.

COTTON FLEA HOPPER

TEXAS: Reports on 537 fields in 64 counties showed a decrease in flea hopper population from 7.7 for the past two weeks to 6.7 per 100 terminal buds this week. Twenty-three percent of the fields were not infested; 56% averaged less than 10 flea hoppers and 21% of the fields more than 10 flea hoppers per 100 terminal buds. Some heavily-infested fields occur in the coastal region.

(over)

OKLAHOMA: The infestation remains light over most of the State but is increasing some in the extreme southeastern section. An average of 4 flea hoppers per 100 terminal buds was found in 229 fields in 26 counties. Forty-five percent of the fields were not infested; 45% had less than ten flea hoppers and only 10% of the fields more than ten flea hoppers per 100 terminals. The highest infestations were found in McCurtain, Choctaw, and Pushmataha Counties.

OTHER PLANT BUGS

Salt River Valley, Arizona: Late-planted cotton is fruiting nicely with normal shedding. Insect populations continued to increase on cotton and alfalfa and most of the stub cotton in the Goodyear area was dusted this week. From 15 to 60 insects per 100 net strokes were collected in the Buckeye section and growers are preparing to dust.

Santa Cruz Valley, Arizona: Sand storms caused some damage to cotton in the Marana district but crop is progressing favorably. Insects decreased slightly, ranging from 0 to 5 per 100 sweeps on cotton.

In the Casa Grande, Coolidge, and Eloy districts insects continued scarce and were causing but little damage to cotton.

Texas: The rapid plant bug continues to damage some fields in the vicinity of Waco.

MISCELLANEOUS INSECTS

The grasshopper situation shows very little change. Considerable damage to cotton continues in a number of Texas counties. C. F. Stiles, Extension Entomologist of Oklahoma, reports that grasshoppers continue to do enormous damage to cotton and other row crops throughout much of the State. Poisoning is under way in most of these counties.

Bollworms were reported from 36 Texas counties and are causing light damage in south central and coastal areas. Spotted, light bollworm infestations have been reported from other States but no heavy infestations requiring the use of insecticides have been reported to date.

Garden webworms were reported damaging cotton in Jefferson County, Arkansas.

Aphids are present in practically all cotton fields but are generally light in all States, except Alabama.

Prepared July 11, 1945.